



ROLE PLAYED BY DIGITALIZATION DURING PANDEMIC: A JOURNEY OF DIGITAL INDIA VIA DIGITAL PAYMENT

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ABSTRACT

The purpose of paper is to study about digital transformation in banking, which is simply a brief distance from the normal bank to the digital world. Banking in economy like India plays a crucial role in day to day life. It's the identical with other financial institutions that find out about clients, work with them and satisfy them. The digital transformation of the Indian economy and therefore the banking sector had recently taken place. Today as we are within the first phase, where (impact of digitalisation on banking sector) many traditional banks offer their customers top quality websites and mobile sites / apps. All this ensures that with an aim of Minimum Government, Maximum Governance, ease of living of the citizens is at the core of Digital India. India's digital payments journey has been marked by specific events that have reshaped user preferences and needs. While, the issuance of debit and credit cards in India has grown steadily for many years, now the turning point was the launch of the United Payments Interface (UPI), demonetisation in 2016 and lockdown due to pandemic Covid-19. These events boost up Digital payments. Today, India is regarded as one of the leading payments ecosystems in the world, operating one of the largest real time payments systems in the world and delivering innovations across the entire payments continuum. It serves as a benchmark to many countries and a case study in leveraging technology to make payments accessible to all. The main purpose of this study is to analyse component-wise contribution in Digital Payment and to Compare the digital payments in terms of volume and values before and after COVID-19. So, to compare all the parameter correlation coefficient model is employed and data collected is both primary and secondary in nature.

Key words: Digital Payment, Banking, Digitalisation, Comparison, Covid-19

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1. INTRODUCTION

Digital payments have witnessed steady growth across the globe with the emerging markets leading the charge in recent times. India's story of digital transformation is one of digital empowerment and digital inclusion, for digital transformation based on technology that is affordable, inclusive and developmental. All this ensures that with an aim of Minimum Government, Maximum Governance, ease of living of the citizens is at the core of Digital India.

India's digital payments journey has been marked by specific events that have reshaped user preferences and needs. While, the issuance of debit and credit cards in India has grown steadily for many years, now the turning point was the launch of the United Payments Interface (UPI), demonetisation in 2016 and lockdown due to pandemic Covid-19. These events boost up Digital payments. Today, India is regarded as one of the leading payments ecosystems in the world, operating one of the largest real time payments systems in the world and delivering innovations across the entire payments continuum. It serves as a benchmark to many countries and a case study in leveraging technology to make payments accessible to all. India is surely one of the rapidly growing country in the world and has great believable to show a rapid progress in transformation of digital payments, largely due to its huge population.

2. REVIEW OF LITERATURE

Roopadarshini. S & Lakshminarayana. K (2018) in their article concluded that the digitization of everything is a step change even greater than the invention and adoption of the internet, primarily because of its scale and pace of change. What we describe today as 'digital' in a few years' time will have no need for the descriptive word. Digital is changing the world, and progress is not linear. In a world where a smartphone is no longer just a smartphone, but a potential revolution, we invite organisations to explore what digital advances mean for them and their stakeholders. We support the opinion of executives who view digital much more as an opportunity to be tapped than as a risk to guard against. Not every digital initiative will work for every organisation, and it is important to assess capability and capacity for change before deploying a digital strategy. In general, though, the more holistic the initiative, the greater the chance of success. We believe that those who act holistically, and act now, stand to gain the greatest competitive advantage. Roy Sanghita & Sinha Indrajit (2014) in their paper has shown tremendous growth, but still there has lot to be done to increase its usage. Still 90% of the transactions are cash based. So, there is a need to widen the scope of electronic payment. Innovation, incentive, customer convenience and legal framework are the four factors which contribute to strengthen the E-payment system. Kumar & Piyush (2018), concluded that with the increasing popularity of transactions through cards, cash is slowly but surely expected to die a natural death. there are difficulties in implementing the idea of cashless economy in a vast country like India where a large number of people are living under misery and poverty, yet a beginning had to be made someday. Indian consumption is still dominated by cash, with cards contributing only 5 per cent of the personal consumption expenditure. In developed countries, 30-50 per cent of spends happen through cards. So there is huge growth opportunity. The rapid growth of smart phones, Internet penetration and e-commerce is complementing these; card payment volumes have been growing in excess of 25 per cent y-o-y. We expect this trend to continue, aided by the continued increase in debit card activation and usage; debit card transactions have been growing at 31 per cent each year. H M Rakesh & Ramya T J (2014) in their research tried to examine the factors that influence internet banking adoption and concluded awareness, need, perceived usefulness, perceived ease of use, perceived reliability clearly have a positive effect on the use of internet banking. Dhanajay. B. And Suresh Chandra B. (2015), they have explained in their article titled 'The Electronic Banking Revolution in India' that electronic payment system has progressed in the recent year in so many countries

and India also. The RBI vision statement has set the objective to promote electronic payment and less cash economy. Vivek Kumar Singh, Shubham (2017) in their paper 'Security in Digital Payment', conveyed that the Government and RBI as well as cyber security of India must be improved by updating the cyber security framework. Vohra Nimish and Hazra Kingshuk (2018) in their paper 'The state of E-wallets and digital payments in India in 2018' conducted a survey in the last quarter of 2017 in Indian metros – Mumbai, Delhi- NCR, Kolkata, Bengaluru, Hyderabad, Chennai, Ahmedabad, Pune, Jaipur, Indore, Lucknow & Ranchi. The paper studied the frequency, preference, growth spending etc. of various digital payment modes. The Payment and Settlement Act, 2007 has defined Digital Payments. As per this any "electronic funds transfer" means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment.

3. STATEMENT OF THE PROBLEM

There are four/five segments of digital payment and these are controlled by RBI/Banks and NCPI. Now, the question arises among these segments which is most popular among the customers and what are their contribution in digital payment. What was impact on digital payment during lockdown? In this paper we tried to find out answer of these questions.

4. BIFURCATION OF PAYMENT SYSTEM

As per RBI annual report for the year 2019-20 the payment system has been bifurcated into following main segments.

4.1. Settlement System

CCIL Operated System :- This system includes Settlements of CBLO, government securities and forex transactions are through the Clearing Corporation of India Ltd. (CCIL). Government Securities include outright trades and both legs of repo transactions and triparty repo transactions. With effect from November 5, 2018, CCIL discontinued CBLO and operationalised triparty repo under securities segment.

4.2. Payment System

4.2.1. Large Value Credit Transfer

4.2.1.1. Real Time Gross Settlement (RTGS), which can be defined in to two parts- 'Real Time' means the processing of instructions at the time they are received rather than at some later time.' Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis). Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable. RTGS enables transfer of money from one bank account to another on a "real time" and on "gross" basis.

4.2.2. Retail Segment

Retail segment consists five components but as digital payment only first four components are considered by the RBI namely:-

4.2.2.1. Credit Transfers: - RBI further classified it into the following seven sub- segments

4.2.2.1.1. Aadhaar Enabled Payment System (AEPS/AePS) – AEPS allows online interoperable financial inclusion transactions at PoS (Micro-ATM) through the Business Correspondent of any bank using the Aadhaar authentication. Under this system, the beneficiary

is identified and authenticated based on Aadhaar biometric authentication for the purpose of carrying out financial transactions from her / his account.

4.2.2.1.2. Aadhaar Payment Bridge System (APBS) – APBS uses Aadhaar number as the unique key / parameter for electronically channelizing the Government subsidies and benefits under Direct Benefit Transfer (DBT) schemes in the Aadhaar-linked bank accounts of the intended beneficiaries. APBS is a part of NACH.

4.2.2.1.3. Electronic Clearing Service (ECS) – There are two variants of ECS – ECS Credit and ECS Debit. ECS Credit facilitates one-to-many payments such as dividend, salary, interest payments, etc. and ECS Debit facilitates many-to-one payments such as utility payments and works based on customer's standing mandate. ECS is operated by RBI and banks.

4.2.2.1.4. Immediate Payment Service (IMPS) – IMPS is a fast payment system operated by NPCI and is available 24x7. Under this, beneficiary gets funds on a real time basis with the settlement between banks happening on a deferred net basis.

4.2.2.1.5. National Automated Clearing House (NACH) – This system was started by the National Payments Corporation of India (NPCI) on December 29, 2012, to facilitate inter-bank, high volume, electronic transactions which are repetitive and periodic in nature.

4.2.2.1.6. National Electronic Funds Transfer (NEFT) – NEFT facilitates funds transfer across all computerised branches of banks (member / sub-member of NEFT) across the country. Presently, NEFT operates in half hourly batches – there are twenty-three settlements from 8 am to 7 pm on weekdays (Monday through Friday) and on working Saturdays. NEFT is operated by RBI.

4.2.2.1.7. Unified Payments Interface (BHIM UPI Platform) – The BHIM UPI Platform, which is application- based and usable on smartphones with internet access, has the potential to revolutionize the mobile payments arena. The customers can provide just a registered virtual address for making or receiving payments. The BHIM UPI Platform was launched in August 2016, and currently 144 banks take part in the scheme. BHIM UPI QR has grown to be a lightweight, low cost method to bring merchants into the acceptance network. The committee is of the view that this must be encouraged to rapidly expand the number of merchants that are able to accept payments digitally.

4.2.2.2 Debit Transfers and Direct Debits :- It has further four sub parts as below :-

4.2.2.2.1. BHIM Aadhaar Pay- BHIM Aadhaar Pay is meant for merchants to receive digital payments from customers over the counter through Aadhaar authentication. It allows for any merchant associated with any acquiring bank on BHIM Aadhaar Pay service, to allow the merchant to accept payment from a customer of any bank, by authenticating the customer's biometrics – currently only fingerprints, directly from the customer's Aadhaar enabled bank account and receive the sale proceeds instantaneously directly into merchant's own bank account.

4.2.2.2.2. Electronic Clearing Service (ECS Dr.) –ECS Debit facilitates many-to-one payments such as utility payments and works based on customer's standing mandate. ECS is operated by RBI and banks.

4.2.2.2.3. National Automated Clearing House (NACH) – NACH have the same features as ECS with a centralized mandate management system. NACH is also used for making payments related to Government benefits, for instance, subsidies. NACH is operated by NPCI. ECS / NACH provide support for pre-approved mandates for bill payments, and standing instructions. A variant of NACH called eNACH has been created, which is digital, and relies on a digital signature of the user (based on eSign with Aadhaar).

4.2.2.2.4. National Electronic Toll Collection (NETC) System- NETC (Linked to Bank Account) In order to save fuel, time and curb pollution as well as ensure seamless movement

of traffic, Electronic Toll Collection (ETC) through FASTag was successfully started on December 15, 2019 by NHAI all over the country. FASTag is a prepaid tag, affixed on the vehicle's windscreen, that enables automatic deduction of toll charges and lets the vehicle pass through the toll plaza without stopping for cash transaction. NETC system facilitates an automated and interoperable electronic toll collection structure across the country's network of highways. NETC operates under the brand name Fastag, and it allows tolls to be collected digitally, on National Highways, allowing smoother movement of vehicles. NETC operates through a linked closed loop wallet, which is funded by the user. Only bank issuers, and acquirers are permitted to operate under NETC.

4.2.2.3 Card Payments

Cards are well understood products at the global level, and find acceptance at stores, as well as for online payments. Cards have played an important role in the spread of digital payments. Cards are also used to withdraw money from ATMs, and hence have been issued to most account holders. India has had the presence of international players in the payments space for many years. In the last decade, an Indian player – NPCI – has also introduced card payments through the RuPay scheme. Non-bank PPI issuers are allowed to participate as members / associate members of authorised card networks. This section looks at the card issuance, acceptance, and usage followed by the issues and possible solutions for debit and credit cards. Finally, a few other payment methods that involve cards are discussed.

Credit cards have been used in India for over 40 years now. While the other digital payments have taken off, the use of cards has gone up as well. There are 3 dominant card schemes in India – RuPay, Mastercard and Visa. Over the past few years, the number of credit cards has grown, but it is overwhelmed by debit cards. India has made tremendous gains in financial inclusion, bringing in most Indians into the banking system. Many of these have been issued a debit card to access these accounts.

4.2.2. Prepaid Payment Instruments (PPIs)

PPIs are payment instruments that facilitate purchase of goods and services, including funds transfer, against the value stored on such instruments. Prepaid instruments have been a useful tool to bring users into the digital payment ecosystem and have shown significant growth in the last 5 years. Interoperability between wallets and bank accounts received a boost, when they could participate in UPI.

4.2.2.5. Paper-based Instruments

Paper-based payments are in the form of cheques, demand drafts, payment orders, banker's cheques, refund orders, warrants, etc. These are also referred to as negotiable instruments. For simplicity, they are generally referred to as cheques. It is not a component of digital payment.

4.2.2.6. Digital Payment includes payment through RTGS, Credit Transfers, Debit transfers & Direct Debit, Card Payments and Prepaid Payment Instruments.

5. ROLE OF THE MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY (MEITY) IN DIGITAL TRANSACTIONS

Post demonetization, the Ministry of Electronics and Information Technology (MeitY) was made the nodal agency for the Digi Dhan mission, and has commenced publication of transaction volume data through the Digidhan Dashboard. The data elements included are RTGS, NEFT, NACH, IMPS, BHIM UPI, BHIM Aadhaar, NETC, AEPS, Credit Cards, Debit Cards, PPIs, Mobile Banking, Internet Banking, Closed System PPIs and Others. Mobile

banking and internet banking are channels to facilitate banking and payments. The transactions on these channels include banking transactions as well. It is recommended that only those transactions which can be considered digital payments should be included in the measurements.

6. OBJECTIVES OF THE STUDY

The main objective of this paper are :-

- To analysis component-wise contribution in Digital Payment.
- Comparison of digital payments in terms of volume and values before and after COVID-19.

7. RESEARCH METHODOLOGY

This study is carried out to estimate the status, potential and importance of Digital Payment. The study focuses on extensive on secondary data. The data has been collected with help of various issues of RBI Bulletins, annual reports of RBI; NPCI statics; research articles; research journal, e-journals etc. The research was conducted with objective to find out the extent towards Digital Payment.

To analysis the available data various statistical tools such as Share percentage; Annual Growth Rate; trend; Compound Annual Growth Rate; Co-efficient of co-relation etc. have been applied.

8. RESULTS AND ANALYSIS

Table -5.1 presents contributions of digital payment in total payments from 2013-14 to 2019-20 in absolute figures as well as in relative terms. Digital payment contribution increasing year by year and was in the range of 89.38 to 95.41 in 2013-14 to 2019-20 respectively. Its annual growth was positive in the study period except the year 2019- 20 due to lockdown of economy. Trend values also presenting increasing trend. Compound Annual Growth Rate (CAGR) of digital payment was 0.109 in the study period. Contribution of non-digital payment decreased from 10.62 to 4.59 in the study period. Annual growth rate was negative except the years 2017-18 and 2018-19 and presenting decreasing trend. CAGR of non- digital payment was negative i.e. (-) 0.025 from 2013-14 to 2019-20. Although annual growth rate of total (digital & non-digital) payments was positive and presents an increasing trend. CAGR of total payment was positive i.e. 0.099 during the study period. Co-efficient of co-relation between digital and non-digital payment was negative i.e. (-) 0.667. So, it can be inferred that mode of digital payment is a mile-stone for cashless economy as well as for Digital India.

Contribution of retail and large value segment (Retail Payments & RTGS) were explained through table no. 2 in absolute as well as in relative terms. In 2019-20, retail value of Rs. 313525 Bn were digitally paid in comparison to Rs. 51323 Billion in 2013-14 with a hike of approximately 510 %. In relative terms its share in total digital payment in 2019-20 has reached up to 19.29 % from 6.53% in 2013-14 with positive AGR and increasing trend. But its 313525 Bn were digitally paid in comparison to Rs. 51323 Billion in 2013-14 with a hike of approximately 510 %. In relative terms its share in total digital payment in 2019-20 has reached up to 19.29 % from 6.53% in 2013-14 with positive AGR and increasing trend. But its compound annual growth rate for the study period was negative. Large value segment (RTGS) digitally payment made was Rs. 1311565 Bn in absolute terms in 2019-20 compare to Rs. 734252 Bn in 2013-14, but its share in total digital payment decline from 93.47 to 80.71 % in 2013-14 to 2019-20.

Table 1 Contribution of Digital Payment in Total Payment (Rs. In Bn)

| Year | Digital Payments | | | | Non-Digital Payment | | | | Total Payment | | |
|---------|------------------|------------------|-------|----------|---------------------|------------------|-------|---------|---------------|-------|----------|
| | Amt. | Share % in Total | AGR | Yc | Amt. | Share % in Total | AGR | Yc | Amt. | AGR | Yc |
| 2013-14 | 7,85,575 | 89.38 | | 10689558 | 93,316 | 10.62 | | 1188928 | 8,78,891 | | 10778489 |
| 2014-15 | 8,23,924 | 90.61 | 4.88 | 10854683 | 85,434 | .39 | -8.45 | 1187103 | 9,09,358 | 3.47 | 10941788 |
| 2015-16 | 9,19,009 | 91.82 | 11.54 | 11019808 | 81,861 | 8.18 | -4.18 | 1185278 | 10,00,870 | 10.06 | 11105087 |
| 2016-17 | 11,17,169 | 93.24 | 21.56 | 11184933 | 80,958 | 6.76 | -1.10 | 1183453 | 11,98,127 | 19.71 | 11268386 |
| 2017-18 | 13,75,714 | 94.38 | 23.14 | 11350058 | 81,893 | 5.62 | 1.15 | 1181628 | 14,57,607 | 21.66 | 11431685 |
| 2018-19 | 16,48,048 | 95.23 | 19.80 | 11515183 | 82,461 | 4.77 | 0.69 | 1179803 | 17,30,509 | 18.72 | 11594984 |
| 2019-20 | 16,25,090 | 95.41 | -1.39 | 11680308 | 78,248 | 4.59 | -5.11 | 117797 | 17,03,338 | -1.57 | 1175828 |
| CAGR | 0.109 | | | | -0.025 | | | | 0.099 | | |
| r | -0.667 | | | | | | | | | | |

Source : Compiled from various Annual Reports of RBI and NPCI data

Its annual growth rate was positive except the year 2019-20, trend value also presents increasing trend with 0.086 CAGR.

There was highly positive co-relation between retail and large value segments in digital payments. It can be concluded that contribution of retail value segment increasing day by day and it will be very helpful for conversion of unorganised to organised economy. Indeed, in future digital payment will be backbone of Indian economy.

Table 2 explains component-wise contribution in retail value segments in digital payment from 2013-14 to 2019- 20 in absolute figures as well as relative terms. It shows there are four main components of retail segments as per RBI annual reports i.e. Credit Transfer; Debit Transfer and Direct Debit; Card Payments and Prepaid Payment Instruments (PPIs). In absolute figures as well as contribution in total retail payments Credit Transfer mode of digital payment is dominating among these with above 91% during study period. Its annual growth rate was positive but fluctuating and trend values presents an increasing trend.

Table 2 Contribution of Retail Value segment (Retail Payments) and Large value segment (RTGS) Payments in Total Digital Payment (Rs. In Bn)

| Year | Retail Value Segment in Digital Payment | | | | Large Value Credit Transfer - RTGS | | | | Total Digital Payment |
|---------|---|------------------|-------|---------|------------------------------------|------------------|-------|---------|-----------------------|
| | Amt. | Share % in Total | AGR | Yc | Amt. | Share % in Total | AGR | Yc | Amt. |
| 2013-14 | 51,323 | 6.53 | | -127312 | 7,34,252 | 93.47 | | 667173 | 7,85,575 |
| 2014-15 | 69,892 | 8.48 | 36.18 | -79337 | 7,54,032 | 91.52 | 2.69 | 784322 | 8,23,924 |
| 2015-16 | 94,431 | 10.28 | 35.11 | -31362 | 8,24,578 | 89.72 | 9.36 | 901471 | 9,19,009 |
| 2016-17 | 1,35,265 | 12.11 | 43.24 | 16613 | 9,81,904 | 87.89 | 19.08 | 1018620 | 11,17,169 |
| 2017-18 | 2,08,589 | 15.16 | 54.21 | 64588 | 11,67,125 | 84.84 | 18.86 | 1135769 | 13,75,714 |
| 2018-19 | 2,91,166 | 17.67 | 39.59 | 112563 | 13,56,882 | 82.33 | 16.26 | 1252918 | 16,48,048 |
| 2019-20 | 3,13,525 | 19.29 | 7.68 | 160538 | 13,11,565 | 80.71 | -3.34 | 1370067 | 16,25,090 |
| CAGR | -0.025 | | | | 0.086 | | | | |
| R | 0.987 | | | | | | | | |

Source: Compiled from various Annual Reports of RBI and NPCI data

Its compound growth rate was 0.293 % during this period. Contribution of debit transfer and direct debits in absolute figures was on third position and share percent in total with 0.34 to 3.41 %. AGR was highly fluctuating with (-) 57.92 in 2016-17 to 819.23 in 2019-20. Its trend was increasing with 0.325 % CAGR. Share of card payments in total retail payments stood on second position with 4.75 % to 5.09 %. Its AGR was positive but fluctuating. Trend values presenting increasing trend of this component and its CAGR was 0.291. Contribution of prepaid payment instruments (PPIs) in absolute figures was on 4th rank among these four components and its share in total was below 1 % during the study period. Its annual growth rate was positive but declining year by year from 162.96 in 2014-15 to 1.25 in 2019-20 while trend values presenting increasing trend. It should be noted that CAGR of this component was on top with 0.598 among these. In nut shell among all the four components of retail value segments credit transfer is dominating followed by card payments; debit transfer & direct debits and PPIs.

Table 3 Component wise contribution in Retail Value Segment in Digital Payment (Rs. In Bn)

| Year | Credit Transfers | | | | Debit Transfers and Direct Debits | | | |
|---------|------------------|------------------|-------|---------|-----------------------------------|------------------|--------|------|
| | Amt. | Share % in Total | AGR | Yc | Amt. | Share % in Total | AGR | Yc |
| 2013-14 | 47399 | 92.35 | | 1020728 | 1268 | 2.47 | | 595 |
| 2014-15 | 64466 | 92.24 | 36.01 | 1065261 | 1888 | 2.70 | 48.88 | 1288 |
| 2015-16 | 86238 | 91.32 | 33.77 | 1109794 | 3222 | 3.41 | 70.68 | 1981 |
| 2016-17 | 125650 | 92.89 | 45.70 | 1154327 | 1356 | 1.00 | -57.92 | 2674 |
| 2017-18 | 195688 | 93.81 | 55.74 | 1198860 | 879 | 0.42 | -35.19 | 3367 |
| 2018-19 | 273948 | 94.09 | 39.99 | 1243393 | 991 | 0.34 | 12.79 | 4060 |
| 2019-20 | 286901 | 91.51 | 4.73 | 1287926 | 9111 | 2.91 | 819.23 | 4753 |
| CAGR | 0.293 | | | | 0.325 | | | |

Table 4 Component wise contribution in Retail Value Segment in Digital Payment (Rs. In Bn)

| Year | Card Payments | | | | Prepaid Payment Instruments | | | | Total Retail Value Segment in Digital Payment |
|---------|---------------|------------------|-------|-------|-----------------------------|------------------|--------|------|---|
| | Amt. | Share % in Total | AGR | Yc | Amt. | Share % in Total | AGR | Yc | |
| 2013-14 | 2575 | 5.02 | | 1193 | 81 | 0.16 | | -130 | 51,323 |
| 2014-15 | 3326 | 4.76 | 29.17 | 3551 | 213 | 0.30 | 162.96 | 262 | 69,892 |
| 2015-16 | 4483 | 4.75 | 34.79 | 5909 | 488 | 0.52 | 129.11 | 654 | 94,431 |
| 2016-17 | 7421 | 5.49 | 65.54 | 8267 | 838 | 0.62 | 71.72 | 1046 | 1,35,265 |
| 2017-18 | 10607 | 5.09 | 42.93 | 10625 | 1416 | 0.68 | 68.97 | 1438 | 2,08,589 |
| 2018-19 | 14097 | 4.84 | 32.90 | 12983 | 2129 | 0.73 | 50.35 | 1830 | 2,91,166 |
| 2019-20 | 15358 | 4.90 | 8.94 | 15341 | 2156 | 0.69 | 1.25 | 2222 | 3,13,525 |
| CAGR | 0.291 | | | | 0.598 | | | | |

Source : Compiled from various Annual Reports of RBI and NPCI data

Table 5 Comparison of Retail Payments before and after COVID-19 (Rs. In Crore & Vol. in Lakh)

| Months | 2019 | | 2020 | | Absolute Change | | % age change | |
|--------|-------|----------|-------|----------|-----------------|-----------|--------------|--------|
| | Vol. | Amt. | Vol. | Amt. | Vol. | Amt. | Vol. | Amt. |
| April | 26051 | 24276011 | 23646 | 8246850 | -2405 | -16029161 | -9.23 | -66.03 |
| May | 24854 | 26928951 | 25639 | 9203924 | 785 | -17725027 | 3.16 | -65.82 |
| June | 25056 | 26029868 | 26652 | 11766516 | 1596 | -14263352 | 6.37 | -54.80 |
| July | 26235 | 27481479 | 27957 | 11565312 | 1722 | -15916167 | 6.56 | -57.92 |
| August | 26603 | 25232243 | 30387 | 10488314 | 3784 | -14743929 | 14.22 | -58.43 |
| Sept | 25963 | 24409707 | 32238 | 13017370 | 6275 | -11392337 | 24.17 | -46.67 |

Source: Compiled from various RBI Bulletins

Table 5 presents comparison of retail payments before and after COVID-19 for the months of April to September in terms of value and volume. During Covid-19 volume of retail payments in absolute figures decrease in the month of April while it increased month by month in the remaining months of study. In September 2020 total transitions increased by 6275 Lacs in volume and in comparative to September 2019. Fig-1 also shows that except April in all other month volume of retail payments increased during Covid-19.

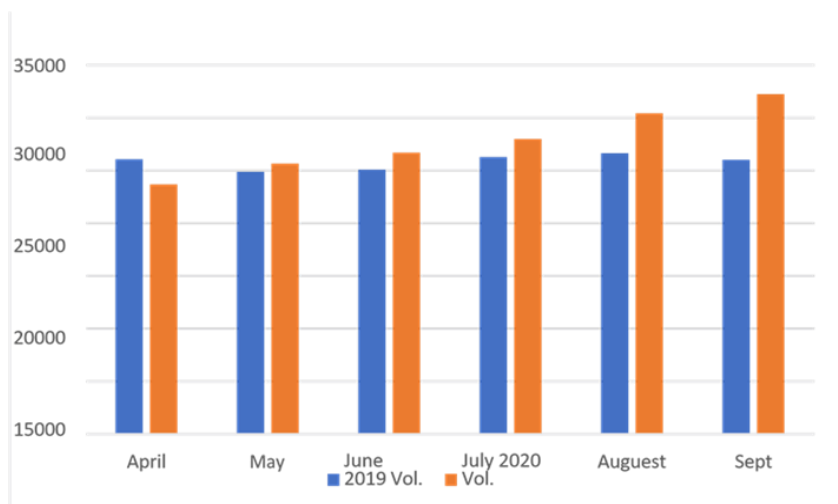


Figure 1 Comparison of Retail Payments before and after COVID-19 (Vol. in Lakh)

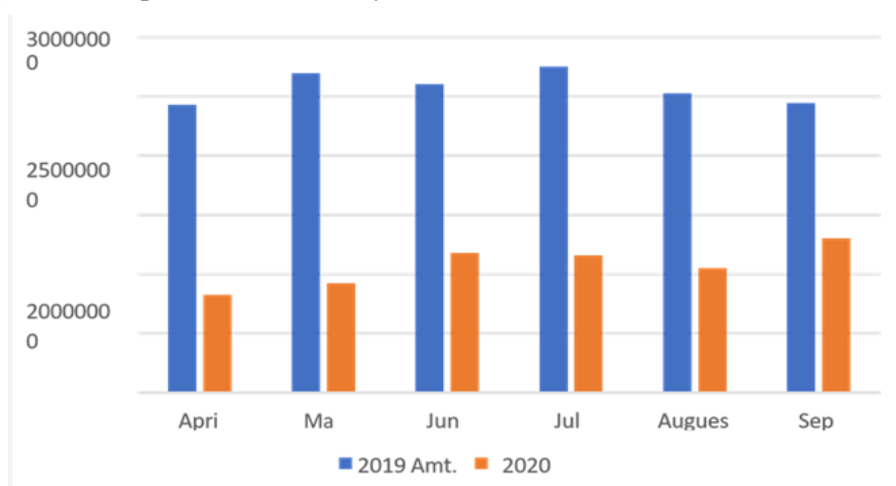


Figure 2 Comparison of retail payment before & after covid 19 (Rs. In Crore)

In percentage volume of retail payments decrease by 9.23 % in April month while it increased by 3.16 % in May to 24.17 % in September 2020. In term of value retail payments decreased Rs. 16029161 crores in April 2020 and Rs. 11392337 crores in 2019-20. It is presented in fig.2. The value of retail payment decreased due to fully lockdown of economy in the months of April to June and further partial lockdown in July to till date.

9. CONCLUSION

India has a diversity of digital payment modes such as for large value segments RTGS and in retail segments- Aeps; ABPS; IMPS; NACH; NEFT; BHIM UPI Platform; BHIM Aadhaar Pay; ECS; NETC; Credit Card; Debit Card etc. Many of these are interoperable, and work through bank accounts, thus giving the users a lot more choice. digital payment mode is a mile-stone for cashless economy as well as for Digital India. Contribution of retail value segment

increasing day by day in digital payment and it will be very helpful for conversion of unorganised to organised economy. Among the four components of retail value segments credit transfer is dominating followed by card payments; debit transfer & direct debits and PPIs. During Covid-19 volume of retail payments in absolute figures decrease in the month of April while it increased month by month in the remaining months of study. In percentage volume of retail payments increased by 24.17 % in September 2020 in compare to previous year i.e before Covid-19. In term of value retail payments decreased in current year in comparison to previous year due to fully lockdown of economy in the months of April to June and further partial lockdown in July to till date. Indeed, in future digital payment will be backbone of Indian economy in moving unorganised to organised economy.

10. FUTURE PERSPECTIVE OF DIGITAL PAYMENTS INDUSTRY IN INDIA

The future perspective of digital payments industry in India looks liberal of promises. It has been pulling investments from venture capital firms / private equity and those international payment companies who want to enter India in future. With the focus on innovation and collaboration of various stakeholders such as Central Government, RBI, banks, payment service providers and the end consumers, it could be a game changer for Indian economy in its moving towards a less-cash based economy and unorganised to organised economy.

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